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# ANALYSIS AND EVALUATION OF FINANCIAL EDUCATION OF THE POPULATION IN GEORGIA

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Financial education, knowledge, behavior, financial attitudes, individual financial wellbeing, household, planning, budgeting.

**ABSTRACT**

The article, based on the latest literary sources and comprehensive factual material, studies and assesses the current level of financial education of the population of Georgia; discusses important components of financial education, financial knowledge, financial behavior, and financial relationships; calculates the generalizing rate of financial education of the population. Based on the submitted answers by the respondents, the report derived financial literacy scores. Financial literacy constitutes the combination of financial knowledge, financial behavior, and financial attitudes. These components were studied separately and scores were assigned to each of them individually. The financial knowledge score takes a value between 0-7 based on the 7 core knowledge questions of the survey; the financial behavior score takes a value between 0-9 based on the responses to 9 behavior questions and statements; lastly, the financial attitude score was calculated using a 5-point scale based on an average of the answers to three attitudinal statements. In this case, respondents assessed their attitudes (i.e. how much they agreed or disagreed with given statements) from 1 point (i.e. fully agreed) to 5 points (fully disagreed).
The overall financial literacy score is obtained as the sum of the three individual scores (financial knowledge (7), financial behavior (9), and financial attitudes (5)). Thus, the overall financial literacy score can take a value between 1 to 21 and can also be normalized by multiplying to 100 (100/21). Both scales - i.e. 21-point scale and 100-point scale- are used throughout this document for reporting purposes.

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**Introduction.** In recent years, financial literacy has gained a prominent position in the policy agenda of many countries. The OECD International Network on Financial Education (OECD/INFE) defines financial literacy as "a combination of financial awareness, knowledge, skills, attitudes, and behaviors, necessary to make proper financial decisions and ultimately achieve individual wellbeing". The importance of collecting informative reliable data, on the levels of financial literacy across the adult population has also been widely recognized (OECD/INFE 2015).

This financial literacy research is highly important from the perspective of the National Strategy for Financial Education, which was developed by NBG, with the involvement of different stakeholders, as this exercise helps realistically assess existing levels of financial literacy in the country, define accurate strategic focuses, and measure all progress achieved in the future within the frames of the strategy. The research methodology is primarily based on the OECD/International Network for Financial Education (OECD/INFE) 2015 Toolkit for Measuring Financial Literacy and Financial Inclusion.

The data, collected within the frames of this financial literacy research helps assess existing levels of financial literacy in the country, shows which groups of the population are the most in need of financial education, demonstrates the gaps in the provision of financial education, serves as a baseline and helps set benchmarks for the overall National Strategy for Financial Education, as well as for individual programs.

This document is based on the collected data in Georgia, primarily using the OECD/INFE 2015 Toolkit for Measuring Financial Literacy. The OECD/INFE questionnaire covers such - core topics of financial literacy, as the knowledge of key financial concepts and the ability to apply them in real life; managing personal and household finances; setting financial goals and striving to achieve them; saving and budgeting; planning for unexpected financial challenges and retirement; borrowing and managing loans; awareness and use of financial products, etc.

**Materials and Methods.** Within the framework of the research, 1100 respondents (age: 18+) were interviewed by face-to-face survey method across the country. There was used a stratified cluster sampling method. The selection was made according to the regions and the type of settlement. Sampling points were selected in proportion to the population; adults were selected randomly in households, based on the "last birthday principle" (adults who had the birthday most recently were chosen as respondents). The fieldwork was conducted between April 1 and April 25, 2020.

In addition to basic frequency analysis, this research includes factorial and statistical analysis using the Affinity Index. Below is a description of these two statistical analysis models.

**Factorial analysis.** The factorial analysis is a general name, denoting a class of procedures used for primary data reduction and summarization. The factorial analysis is a method of interdependence that examines the entire set of interdependent relationships without distinguishing between the dependent and independent variables.

The factorial analysis is used in the following cases:

- To identify key parameters or factors that explain correlations between a set of variables;
- To identify a new, smaller set of uncorrelated variables to replace the original set of correlated variables in subsequent multivariate analysis (regression or discriminant analysis);
- To identify a smaller set of salient variables from a larger set for use in subsequent multivariate analysis.

Mathematically, each variable is expressed as a linear combination of underlying factors. The co-variation among the variables is described in terms of a small number of common factors plus a unique factor for each variable. If the variables are standardized, the factor model may be represented as:

$$Xi = Ai1\ F1 + Ai2\ F2 + Ai3\ F3 + \ldots + AimFm + Vi\ Ui$$

X i = i th standardized variable;
Aij = standardized multiple regression coefficients of variable i, on common factor j;
F = common factor;
Vi = standardized regression coefficient of variable ion unique factor i;
Ui = the unique factor for variable i;
m = number of common factors.

The unique factors are uncorrelated with each other and with the common factors. The common factors themselves can be expressed as linear combinations of the observed variables:

$$Fi = Wi1X1 + Wi2\ X2 + Wi3\ X3 + \ldots + WikXk$$

Fi = estimate of i th factor;
Wi = weight or factor score coefficient;
k = number of variables.

Within the frames of this financial literacy and financial inclusion study, factorial analysis was performed to divide the Georgian population into groups, based on different criteria, and to analyze these groups individually. The criteria included: actions taken to achieve financial goals; retirement plans; financial products in use; money management styles.

Affinity Index-based Analysis: The affinity Index shows the ratio of specific indicators in a given target group to the total population. Within the frames of this study, the Affinity Index was used to determine specific characteristics of certain groups.

Example 1: The average financial literacy score of the Georgian population is 58.8 out of max 100. Working in top management has received the highest financial literacy scores (70.9) within the employed segment, and its Affinity Index (AFFX) is 118.

The affinity index for the top management group was calculated using the following method = Top management group's financial literacy score X 100 / the Georgian population's average financial literacy score (70.9 X 100 / 58.8 = 121).

Conclusion: There is an 18% more probability of meeting the segment with above-average financial literacy levels in the Top Management group.

Example 2: 47% of the Georgian population is male. 65% of Business-minded segment is male. The Affinity Index for Business-minded males = 65% X 100 / 47% = 140.

Conclusion. There is a 40% higher probability of meeting men in the Business-Minded segment than men in the total population of Georgia.

Interpretation.

- If the Affinity index >100, this means that the proportion of people in a specific target group is higher than the total population.
- If the Affinity index =100, this means that the proportion of people in a specific target group equals their proportion to the total population.

**Results and Discussion.** As a result of the research, it was found that Financial knowledge is an essential component of financial literacy, as far as having adequate and reliable knowledge allows individuals to compare financial products and make appropriate, well-informed financial decisions.

Basic knowledge of financial concepts and the ability to apply numeracy skills in a financial context also ensure that individuals can act autonomy to manage their financial matters and appropriately react to challenges and other events that may have implications for their financial well-being.

Table 1. Knowledge test questions

| Question code | Text | Possible answers | Purpose |
|---|---|---|---|
| QK2 | Imagine that five brothers have gotten a gift of GEL 1,000 in total. If the brothers have to share the money equally how much does each one get? | Open answer [Correct answer GEL 200] | Test the ability to perform basic mental arithmetic in a financial context. |
| QK3 | Imagine that five brothers have gotten a gift of GEL 1,000 in total and brothers have to share the money equally. If they have to wait for one year to get their part of the GEL1,000 and inflation stays at 5% percent. In one year will they be able to buy. | Multiple choice [correct answer 'less with their share of the money than they could buy today or 'It depends on the types of things that they want to buy] | Test the ability to understand how inflation impacts purchasing power |
| QK4 | You have lent 25 GEL to a friend and he gave you 25 back the next day. How much interest he has paid on this loan? | Open answer [correct answer 'none'/0] | To test the understanding of interest without difficult arithmetic |
| QK5 | Let's say you put 100 GEL in a savings account without commission and taxes with a guaranteed interest rate of 2% per year. You do not make any further payments to this account or withdraw money. How much will be on the account at the end of the first year after interest has been paid? | Open answer [correct answer GEL102] | Test the ability to calculate simple interest on savings |
| QK6 | How much will be in the account at the end of five years? [add if necessary: remembering there are no fees or tax deductions]. | Multiple choice [Correct answer More than110 GEL, but only taken into account if QK5 is correct] | test whether the respondent is aware of the additional benefit of compounding |
| QK7a | If someone offers you to make a lot of money, likely, you will also lose a lot of money. | There is likely a chance that you will lose money. True/False [correct answer: True] | test whether respondent understands the typical relationship between risk and profit |
| QK7b | High inflation means that the cost of living is increasing rapidly | True/False [correct answer: True] | check to understand the meaning of the term inflation |
| QK7c | Usually, it is possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares or it is less likely that you will lose all of your money if you save it in more than one place. | True/False [correct answer: True] | Test whether the respondent is aware of the benefit of diversification |

The evidence indicates that higher levels of financial knowledge are associated with positive financial outcomes, such as planning for retirement, as well as with the decline in negative outcomes, such as debt accumulation. A financially literate person should have some basic knowledge of key financial concepts and the ability to apply numeracy skills in financial situations. The questionnaire includes 7 questions designed to test knowledge concerning financial concepts, such as simple and compound interest, risks, inflation, and profitability. Please see Table 1 for the detailed list of 7 knowledge questions.

The seven knowledge questions provide a good overview of a person's basic knowledge, his/her general willingness to absorb financial information, and ability to solve particular problems.

The financial knowledge score is created by counting the number of correct answers given by each respondent to 7 questions, which cover main financial concepts (Table 1). According to the OECD/INFE methodology, a high level of financial knowledge is defined as 5 or more correct responses to these 7 questions (i.e. answering at least 70% of the questions correctly). In Georgia's case, 54% of the respondents achieved this score, indicating that about half of the population is reasonably knowledgeable. The average financial knowledge score for the entire population is 4.5 out of a maximum of 7.

60% of the Georgian population knows what happens to the purchasing power of money if inflation stays at the same level for one year (QK3). Further, 94% of the population understands the concept of interest, and correctly identified that no interest had been paid on the loan in question QK4 in Table 1.

The concern is a large number of the population who could not calculate simple interest (percentage) on a savings account over one year (QK5), as well as the impact of compounding over 5 years. Only 51% of the population was able to calculate simple interest correctly, and 54% of the population failed to identify the impact of compounding on a savings account. Only 22% of the population answered both questions correctly. 79% of citizens understand the basic relationship between risk and profit (QK7a). The definition of inflation (QK7b) is also well known for 85% of the population, while the concept of risk diversification (QK7c) appears to be more challenging. 37% of the respondents were unable to answer this question correctly.

Finally, we can see that most of the respondents can correctly answer simple knowledge-based questions, it is significantly more difficult for them to give correct answers to harder questions (Table 2).

Table 2. Answers to individual financial literacy questions

| **Correct answers to knowledge questions** | | | | | | | |
|---|---|---|---|---|---|---|---|
| QK3 | QK4 | QK5 | QK6 | QK5&6 | QK7a | QK7b | QK7c |
| Time-value of money | Interest paid on a loan | Simple interest on savings | Compounding over 5 years | Combined simple interest and compounding | Risk and profit | Definition of inflation | Diversification |
| 60% | 94% | 51% | 46% | 22% | 79% | 85% | 63% |

The research included a self-assessment element to test how the respondents feel their knowledge of financial matters compares to other adults. 65% of the respondents say that their level of knowledge of financial affairs is on the middle level. Only 4% of the population's financial knowledge is very high, and 5% - is very low.

If we compare the respondents' assessment of their level of financial knowledge and the actual knowledge scores, we can see that Georgians somewhat underestimate their financial knowledge levels. the average rate of middle-level own knowledge population is about 65%, and 17% - is high, while according to the OECD/INFE methodology, 54% of the population is aware of that. The actions and behavior of consumers determine their financial well-being in both the short and long term. Some behaviors, such as delaying payment of bills or choosing financial products without prior verification, can negatively affect the financial situation of individuals and households. Therefore, it is very important to try to measure financial behavior in any financial literacy survey.

The OECD / INFE Core Questionnaire contains many questions in a variety of styles to inquire about a range of positive and negative behaviors adult population, like thinking and decision-making before

buying, paying bills on time, budgeting, saving, and borrowing. Some of the indicators used to measure financial behavior are based on a 5-point scale, similar to the one used to define attitudes (below you can read more about). this allows the respondent to decide which behavior is the right (Table 3).

Table 3. Statements about behavior

| Question code | Text | Possible answers |
|---|---|---|
| QF10_1 | Before I buy something I carefully consider whether I can afford it | 5 point scale: 1=Completely agree; 5=completely disagree |
| QF10_4 | I pay my bills on time | |
| QF10_6 | I keep carefully on my financial issues | |
| QF10_7 | Set long-term financial goals and strive to achieve them | |

Respondents who rate themselves at 1 or 2 points on a 5-point scale are financially competent. 90% of surveyed agreed or strongly agreed that they are careful with their purchases. Paying bills on time is also quite common for 89% of the population, followers of their financial issues are 75%. In contrast, fewer respondents (41%) reported that they have long-term financial goals and are striving to achieve them (Table 4).

Table 4. Percentage redistribution of financial behaviors among the population

| Carefully considers purchases | Pays bills on time | Keeps a close watch on personal financial affairs | Sets long term goals and strives to achieve them |
|---|---|---|---|
| 90% | 89% | 75% | 41% |
| % of respondents who agreed i.e. put themselves at 1 or 2 on the scale | | | |

The rest of the indicators of financial behavior used in this monograph were created by combining answers to several questions, each of which will be discussed separately below. Therefore, we call them indicators obtained from a combination of several answers.

**Budgeting.** Budgeting is widely recognized as a valuable money management tool and an essential component of financial literacy. However, it should be noted that the presence of a family budget, but the lack of responsibility for its preparation, or any other financial decisions in the family cannot be considered financially sound behavior. Likewise, a person cannot be considered financially literate if he/she is responsible for financial decisions in a household but does not have a budget at all. Thus, these two indicators were combined to create a single, common indicator, which, based on two questions given in Columns 1 and 2 of Table 5 identifies those individuals who take full or partial responsibility for financial matters in a household with a budget (Table 5, Column3).

As you can see from Table 5 below, 57% of respondents usually have a budget and also take responsibility for financial decisions in the family.

Table 5. Household financial decisions and budgeting

| Who is responsible for making day-to-day decisions in your household? | Does your household have a budget? [Yes] | Responsible for financial decisions in a household with a budget |
|---|---|---|
| 87% | 64% | 57% |
| % making decisions by themselves or with someone else | % responding yes | % making decisions and reporting that the household has a budget |

The analysis of the separate components (Columns 1 and 2) of this combined indicator shows that most of those surveyed (87%) take at least some responsibility for household financial decisions, rendering this question a poor determinant of financial literacy by itself, as evidenced by the results obtained through this study. As it shows, 64% of the respondents have a budget in a household.

**„Active" saving**: Saving is considered to be an essential prerequisite for financial well-being. Those who save normally, better manage their finances, achieve financial goals, and solve financial problems.

The OECD / INFE tool, in addition to regular contributors, aims to identify "active" contributors. The indicator of "active" saving takes into account only "active" methods of saving, which means, those answers are considered actions that were taken by the respondent during the last

12 months. For example, saving in the account is not considered active because there is no activity or processing in it, and those who have access to the bank account have options to choose other, more appropriate methods for saving, such as deposit (OECD / INFE 2016) ... The "active" saving indicator reflects the behavior of savings (ie, putting aside a portion of current income for future use) rather than the quality of the savings available; therefore, it combines various forms of savings, including informal financial products and the purchase of gold or any other property. The results of the survey show that in Georgia 38% of adults save in some way (35% being „active savers "according to OECD/INFE methodology). With low-income and less financially literate consumers mostly saving informally at home; saving methods will be discussed below in more detail.

Shopping of financial products: The indicator for shopping of products combines two questions, presented in Table 6 below. These questions are only asked to people who have made a product choice. In case a respondent had purchased more than one product, the interviewer asked him/her to focus on the most recently chosen product. This design is intended to ensure that the respondent remembers the process.

Table 6. Questions about product selection

| Question-wording | Question wording | Answers | Notes |
|---|---|---|---|
| Qprod2 | Which of the following statements best describes how you made your choice? | a) I considered several options from different companies before making my decision;<br>b) I considered the various options from one company;<br>c) I didn't consider any other options at all;<br>d) I looked around but there were no other options to consider. | This question is intended to find out the extent to which respondents looked at the alternative available products. As this question is multiple-choice. Created combined variable indicates if respondents attempted to shop around: Responses a and d are given a value of 1. Other responses, including no product choice, are given the value of 0. |
| Qprod3 | Which sources of information do you feel most influenced {which one is taken out}? | There are various examples, and countries have also included their own: Product-specific information, best-buy guidance, general advice, media coverage, adverts, etc. | This question is designed to capture information about to which respondents use different types of guidance. Multiple answers are possible: answer coded 1 if they used some types of specific or general information, and 2 if they used independent, professional sources of information. |

The answers to the mentioned two questions showed that only 32.9% of Georgians have tried to look closely at financial products before deciding over the past 2 years. 23.5% of the population did not consider any other options at all, although they had several options.

Deciding to choose a product over the recent period, most of the respondents relied on the information picked up in a bank office (20%), while 17% of the population made this decision based on personal experience, and another (17%) relied on a friend's advice. It is interesting that in total, 11% of the respondents relied on adverts of different media (TV, SMS, etc.), and other information sources had an influence on less than 4% of the audience. Seeking an independent advisor's recommendation is not a common practice in Georgia.

Shortfalls: The OECD/INFE questionnaire includes questions of the respondent's ability to make ends meet, and analyzes their strategies when income does not reach living costs (Table 7). The indicator created from the 2 relevant questions gives a score of 1 to those respondents who have either: a) not faced a shortfall in income during the past year (indicating good financial literacy skills in terms of budgeting and financial management) or b) have fallen in the past, but did not borrow to pay their bills (shows that they already had plans to deal with such situations). Those who borrowed money to make ends had scored 0.

The results show that 62% of the population faced income shortfalls in the past 12 months (Table 8, Column 1), and 45% of the respondents borrowed to make ends meet (Table 8, Column 2), it means that many people do it. Some people do not have minimal savings for such events or they have already exhausted their savings.

Table 7. Questions about shortfalls

| Question number | Question-wording | answers | Notes |
|---|---|---|---|
| QF11 | Sometimes people recognized that their income does not cover their living costs. Has this happened to you personally in the last 12 months? | answer yes/no | |
| QF12 | What did you do to fix the problem the last time? | Multiple answers allowed | This question was used to identify respondents who are borrowing or not meeting existing financial obligations to make ends meet. |

Table 8. Answers to questions

| Respondent reported that their income did not always cover their living costs | Respondent borrowed to make ends meet (% of all respondents) |
|---|---|
| 62% | 45% |

The overall financial behavior score counts positive behaviors which are in the answers to the questions. A minimum value of the behavior score takes 0, and a maximum value is 9. According to the OECD/INFE methodology, a score - 6 or more is considered high, reflecting the proportion of respondents at least 2/3 of the positive behaviors. Only 36% of surveyed in Georgia achieved a behavior score of 6 or more. Research shows that some respondents demonstrated all of the positive behaviors assessed in this study; most people display positive behavior. The average assessment of Georgia's population behavior is 5.0 from the 9 possible.

The OECD/INFE definition of financial literacy recognizes the fact, if individuals have sufficient knowledge and ability to act in a particular, positive way, their attitude may negatively influence their decisions regarding what actions to carry out. For instance, if a person has a negative attitude towards saving for their future, it means that there will be less inclined to undertake such behavior. Further, if individuals prefer to prioritize short-term needs over long-term, then they are not able to build up emergency savings or to plan long-term financially (OECD/INFE 2012).

Therefore, the financial literacy research included three factors of statements to measure respondents' attitudes towards money and finance at all, and also planning for the future (Table 9). These statements ask respondents to use a 5-point scale to indicate whether they agree or disagree with particular statements to capture their disposition or preferences.

Table 9. Provisions on financial relations

| Question code | Text | Possible answers | Notes |
|---|---|---|---|
| QF10 - 2 | I tend to live for today and let tomorrow take care of itself | 5-point scale: 1=Completely agree; 5=completely disagree | To indicate whether the respondent focuses exclusively on the short–term goals (agrees) or has a preference for longer-term security (disagrees). |
| QF10 - 3 | I prefer to spend money than to save it for the long term | | |
| QF10 - 8 | Money needs to be spent | | |

If we look at these questions in detail, we could find that few respondents (32%) prefer to save than to spend. Further, the Georgian population is not conservative with money, only 7% disagree with the statement that money needs to be spent (Table 10).

The fact that fewer people disagree with the statement that "money should be spent" than with the statement "I believe spending money is better than saving for the long term" may indicate that the population has a practical point of view. On the purpose of money as a form of exchange; however, these results also suggest that surveyed audiences do not see the future potential of money and these people are likely to not make adequate savings.

Table 10. Distribution of negative responses to dependent provisions

| **Percentage of Disagreeing Attitude Statement - Demonstrating Long Term Preference** | | | |
|---|---|---|---|
| | it is much better to spend than save it for the long term | I prefer to live for today and let tomorrow take care of itself | Money needs to be spent |
| Disagree | 32% | 68% | 7% |
| % put themselves at 4 or 5 on the scale (disagreeing or strongly disagreeing with statements) | | | |

On a 5-point scale, used for the attitude statements, 1 point indicates short-term financial preferences, and 5 points indicate long-term preferences. The average of the three responses shows to compare overall attitudes towards short-term versus the long-term vision of finance management. According to the OECD / INFE methodology, an average above 3 is considered a "high" score. In Georgia, 34% of the population received more than 3 points, which means that 34% of the respondents prefer long-term financial thinking. The average attitude score of the population is 2.8 out of the maximum of 5 points.

As already mentioned, financial education is a complex concept and it is a combination of knowledge, attitudes, and behaviors. Now we discuss the overall indicator of financial education, which is a combination of the indicators of knowledge, behaviors, and attitudes. The overall score presented here is the sum of respondents' scores on knowledge (0-7), behavior (0-9), and attitudes (1-5). Once again, the overall score can take any value between 1 and 21.

Table 11 reports a breakdown of overall financial literacy scores by demographic. As you can see, the average overall assessment of financial literacy of the Georgian population is 12.3 points on a 21-point scale, which is an intermediate result indicating the need to strengthen initiatives to improve financial literacy in the country.

Table 11. Average scores of financial education in a demographic context (21-point scale)

| **Highlights** | **Points** |
|---|---|
| *1* | *2* |
| GENDER | |
| Female | 12.4 |
| Male | 12.3 |
| AGE | |
| 18 -25 year | 12.5 |
| 26-35 Years | 12.5 |
| 36-45 Years | 13.0 |
| 46 - 55 Years | 12.5 |
| 56 - 65 Years | 12.2 |
| 66 and more | 11.4 |
| EDUCATIONAL LEVEL | |
| University-level education | 13.0 |
| Technical education | 12.1 |
| Complete secondary school | 12.0 |
| Some secondary school level | 10.3 |
| Complete primary school | 9.3 |
| INCOME | |
| Up to 550 GEL a month | 11.8 |
| Between 551 and 900 GEL a month | 13.1 |
| 901 GEL or more a month | 13.4 |
| REGION | |
| Imereti | 13.0 |
| Tbilisi | 12.7 |
| Adjara | 12.5 |
| Kakheti | 12.5 |
| Kvemo Kartli | 12.2 |
| Guria | 12.0 |
| Shida Kartli | 11.6 |
| Mtskheta - Mtianeti | 11.1 |
| Samegrelo | 11.4 |
| Samtskhe-Javakheti | 11.6 |

Continuation of table 11.

| *1* | *2* |
|---|---|
| SETTLEMENT TYPE | |
| City | 12.6 |
| Village | 12.0 |
| LANGUAGE GROUP | |
| Georgian-speaking | 12.4 |
| Other languages | 11.8 |
| EMPLOYMENT | |
| Self-employed | 13.3 |
| In paid employment Apprentice | 13.1 |
| Looking after the home | 10.6 |
| Looking for work [unemployed] | 12.4 |
| Retired | 12.1 |
| Unable to work due to sickness or ill-health | 11.4 |
| Not working | 11.0 |
| Not looking for work | 11.2 |
| Students | 13.4 |
| OCCUPATION | |
| Top Management (incl. government) | 14.9 |
| Specialist-Professional | 13.7 |
| Industrial machinery operators and installers | 13.6 |
| Specialist and assistant professions | 13.2 |
| Non-qualified worker | 12.9 |
| Service and retail personal | 12.9 |
| Office Personal | 12.7 |
| Armed force | 12.4 |
| Specialist or other qualified workers | 11.9 |
| Agriculture workers | 11.3 |
| Total | 12.3 |

Table 12 presents overall demographic financial literacy scores of a 100 point scale system. The average financial literacy score for the entire population equals 58.8. Scores are calculated by the behavioral scores out of 21 possible scores.

Table 12. Average scores of financial education in demographic context (100-point scale)

| **Highlights** | **Points** |
|---|---|
| *1* | *2* |
| GENDER | |
| Female | 58.9 |
| Male | 58.7 |
| AGE | |
| 18 -25 year | 59.5 |
| 26-35 Years | 59.5 |
| 36-45 Years | 62.0 |
| 46 - 55 Years | 59.4 |
| 56 - 65 Years | 57.9 |
| 66 and more | 54.2 |
| EDUCATIONAL LEVEL | |
| University-level education | 62.0 |
| Technical education | 57.8 |
| Complete secondary school | 57.1 |
| Some secondary school level | 48.8 |
| Complete primary school | 44.4 |
| INCOME | |
| Up to 550 GEL a month | 56.0 |
| Between 551 and 900 GEL a month | 62.4 |
| 901 GEL or more a month | 63.6 |

Continuation of table 12.

| *1* | *2* |
|---|---|
| REGION | |
| Imereti | 62.1 |
| Tbilisi | 60.5 |
| Adjara | 59.5 |
| Kakheti | 59.4 |
| Kvemo Kartli | 58.1 |
| Guria | 57.0 |
| Shida Kartli | 55.0 |
| Mtskheta - Mtianeti | 52.7 |
| Samegrelo | 54.1 |
| Samtskhe-Javakheti | 55.1 |
| SETTLEMENT TYPE | |
| City | 60.2 |
| Village | 56.9 |
| LANGUAGE GROUP | |
| Georgian-speaking | 59.0 |
| Other languages | 56.3 |
| EMPLOYMENT | |
| Self-employed [work for myself] | 63.4 |
| In paid employment [work for SMN else] | |
| Apprentice | 62.4 |
| Looking after the home | 50.5 |
| Looking for work [unemployed] | 59.2 |
| Retired | 57.4 |
| Unable to work due to sickness or ill-health | 54.5 |
| Not working and not looking for work | 52.4 |
| Student | 53.2 |
| | 64.0 |
| OCCUPATION | |
| Top Management (incl. government) | 70.9 |
| Specialist-Professional | 65.4 |
| Industrial machinery operators and installers | 64.6 |
| Specialist and assistant professions | 62.8 |
| Non-qualified worker | 61.6 |
| Service and retail personnel | 61.3 |
| Office Personnel | 60.3 |
| Armed force | 59.2 |
| Craftsmen and other qualified workers | 56.8 |
| Agriculture worker | 54.0 |
| Total | 58.8 |

This reflects a general understanding that financial well-being primarily is the result of positive behavior. And financial education efforts must impact positively to change negative behavior.

Essentially there is no difference in the overall financial literacy score between genders. Men showed slightly better results in financial knowledge scores; on the other hand, women achieved somewhat higher financial condition scores. But generally, both genders received the same behavior scores.

There is a noticeable variation in financial literacy levels by age and income. According to Table 12, younger and middle-aged (age: 18-55) respondents showed higher levels of financial literacy than the oldest respondents (age: 56+). The highest overall financial literacy score was attained by respondents aged 36 to 45 (62.0 points out of 100), and the lowest scores were received by respondents over 66 years old (54.2). There is a positive link between general education levels and financial literacy. Better educated individuals have higher literacy scores. people with university education got the highest scores (62.0 points), completing secondary school education received 57.1 points, and primary school educated received only 44.4 points.

In general, the urban population displayed higher financial literacy levels than the rural population. Imereti (62.1), Tbilisi (60.5), and Adjara (59.5) achieved above middle-level financial

literacy scores, while Mtskheta-Mtianeti (52.7), Samegrelo (54.1), and Shida Kartli (55.0) received the lowest overall financial literacy scores. Georgian-speaking respondents reached higher financial literacy scores (59.0) than non-Georgian speakers (on average 56.3). This may be due to the language barrier of a particular population who have the limited ability of information choices.

There is a positive correlation between financial literacy and employment status. Higher financial literacy leads to improved employment levels; employed respondents and students attained above-average literacy scores compared to their other unemployed peers. In terms of the employed population, the highest financial literacy scores have attained the respondents in the top management positions (including, legislators and government officials, - 70.9) and specialist professionals (65.4). Craftsmen, specialists, and other workers (56.8), agriculture workers received the lowest financial literacy scores (54.0).

**Conclusions.** In the modern world, the accessibility and the complexity of financial services grow in parallel with the rapid development of the financial system. Therefore, it is imperative to equip individuals with the capacity for managing their finances well and for making the best financial decisions.

This research aimed at examining the existing levels of financial literacy in the country, which is essential for setting informed objectives, choosing effective approaches, and allocating resources wisely within the frames of the National Strategy for Financial Education.

The research has established the following key findings:

- Financial knowledge of the Georgian population is on the intermediate level: most of the respondents can perform elementary calculations on "simple" interest (94%), and understand key financial concepts, such as inflation (85%) and risk and profit (79%); however, far fewer respondents understand the time value of money (60%) and the concept of diversification (63%). half of surveyed can neither calculate simple interest on a deposit (51%) nor detect the impact of compounding (46%). Overall, most respondents gave correct answers to simple questions; however, more difficult questions remain a challenge for them.
- Smart financial behavior is one of the main determinants of financial well-being. This research analyzed a range of financial behaviors characterizing the Georgian society, including, expenditures planning, saving, and use of financial products, such as loans and deposits, and in conclusion, the financial behavior of the population can be assessed as mixed. Some important responsible behaviors, such as paying bills on time (89%) and keeping a close watch on personal finances (75%) can be widely observed across the population. Further, about 38% of the respondents saved money in some way over the past year. However, only 41% of the population sets long-term goals and strives to achieve them, and 45% of the surveyed audience has borrowed when their income did not cover their expenses. Those with little income and low financial literacy levels usually save at home and rarely use formal methods, while those with higher financial literacy and income levels increasingly use bank accounts and investment products for saving, which shows that there is a strong link between the use of formal means of saving, on the one hand, and income and financial education levels on the other.
- People's attitudes and preferences towards finances determine their behavior. The analysis of financial attitudes reveals that only 32% of the population enjoys saving more than spending and the vast majority consider that money needs to be spent. Furthermore, about 66% of the respondents focus on short-term financial needs instead of long-term financial goals, which raises concerns regarding financial security and sustainability.

The findings of the present research are important for setting certain standards and orientations in the field of financial education, and for developing financial literacy programs. The overall financial literacy levels of the Georgian population can be assessed as intermediate, leaving wide space for improvement.

The results of the research reveal a significant gap between the literacy levels of different segments of the population, highlighting the need for diversified approaches. To attain sustainable progress, financial literacy efforts must focus not only on improving the knowledge but also on positively changing the target audience's behavior and attitudes, as significant gaps can be observed in these directions as well.

Finally, improving financial literacy levels in the country is a complex task. Involvement of different stakeholders and ensuring the provision of financial education through diversified venues, including, both - formal and non-formal educational settings, is indispensable.

## REFERENCES


1. Andrea Grifonii and Flore-Anne Messyi (2012), Current Status of National Strategies for Financial Education: A Comparative Analysis and Relevant Practices, OECD Working Papers on Finance, Insurance and Private Pensions, No. 16, OECD Publishing, Retrieved from https://www.oecd-ilibrary.org/finance-and-investment/current-status-of-national-strategies-for-financial-education_5k9bcwct7xmn-en
2. Atkinson, A. and Messy, F-A, (2012), Measuring Financial Literacy: Results of the OECD INFE Pilot Study, OECD Working Papers on Finance, Insurance and Private Pensions, No. 15, OECD Publishing, Retrieved from http://dx.doi.org/10.1787/5k9csfs90fr4-en
3. Gechbaia, B. Vanishvili, M. and Mushkudiani Z. (2017), Segmentation of the Georgian population according to financial capabilities and money management style, Gulistan black sea scientific journal of academic research (ISSN: 1987 - 6521, E – ISSN: 2346 – 7541; DOI prefix: 10.25265), June – July 2017, volume 35, issue 03. - P. 4-9, Retrieved from https://agris.fao.org/agris-search/search.do?recordID=GE2018100139
4. Vanishvili, M. and Chelidze, M. (2017), A Segmentation of the Georgian population according to financial resources and a style of money management, European Research: Innovation in Science, Education, and Technology // European research № 7 (30) / Сб. ст. по мат.: XXX межд. науч.-практ. конф. (United Kingdom, London, 10-11 July 2017). - P. 10-15, Retrieved from https://internationalconference.ru/images/PDF/2017/30/a-segmentation-of-georgian.pdf
5. Hung, A., Yoong J. and Brown E. (2012), Empowering Women Through Financial Awareness and Education, OECD Working Papers on Finance, Insurance and Private Pensions, No. 14, OECD Publishing, Retrieved from http://dx.doi.org/10.1787/5k9d5v6kh56g-en
6. Kempson, E. (2009), Framework for the Development of Financial Literacy Baseline Surveys: A First International Comparative Analysis, OECD Working Papers on Finance, Insurance and Private Pensions, No. 1, OECD Publishing. DOI: 10.1787/5kmddpz7m9zq-en
7. OECD/INFE (2012), High-level Principles on National Strategies for Financial Education. - Retrieved from https://www.oecd.org/finance/financial-education/OECD-INFE-Principles-National-Strategies-Financial-Education.pdf
8. OECD/INFE (2015), 2015 OECD/INFE Toolkit for Measuring Financial Literacy and Financial Inclusion, OECD, Paris. - Retrieved from http://www.oecd.org/daf/fin/financial-education/2015_OECD_INFE_Toolkit_Measuring_ Financial_Literacy.pdf
9. OECD/INFE (2016), OECD/INFE International Survey of Adult Financial Literacy Competencies. - Retrieved from http://www.oecd.org/daf/fin/financial-education/OECD-INFE-International-Survey-of-Adult-FInancial-Literacy-Competencies.pdf